

# VENTILATION DUCTING FOR KITCHENS & BATHROOMS

Modern and modernised homes are designed or adapted to eliminate draughts and to retain heat inside the property. This reduces the free movement of air causing condensation which can often become a problem as moist air generated in the kitchen or bathroom cannot escape.

Extractor fans and ducting are generally the answer providing the means to mechanically remove moisture and fume laden air to the outside.

Wickes flat rectangular ducting system is often ideal enabling duct runs to be built up and concealed behind cupboards, along the top of wall units, in the loft space

between joists or in ceiling voids where circular ducting would not always be suitable.

In newbuild situations the ducting enables the requirements of the Building Regulations regarding the ventilation of kitchens, bathrooms and W.C.s to be achieved.



The Wickes ventilation ducting system consists of components which push fit together to form a run of ducting to suit most situations utilising extractor fans or cooker hoods. Installation is straightforward needing no specialised skills.

## Benefits

The Wickes ducting system:

- Low maintenance
- Corrosion resistant
- Lightweight and easy to fit
- Flat channel can easily be cut using a hacksaw
- Components are manufactured from durable plastic materials

The Wickes ducting system consists of the components shown overleaf.

By using Wickes ducting components a cooker hood or extractor fan may be positioned conveniently and not always directly on an outside wall giving more freedom to position appliances in the kitchen, bathroom and utility room. Once the preferred positioning of the hob, cooker hood or bathroom fan has been decided upon, the ducting can easily be designed to extract unobtrusively to the outside.

In newbuild situations the current Building Regulations, Part F1 (1995) state that kitchens, bathrooms, toilets and utility rooms, etc., should be fitted with mechanical ventilation as in the chart which follows.

## SUMMARY OF SPECIFIC REQUIREMENTS OF THE BUILDING REGULATIONS DOCUMENT F1 (1995 EDITION)

<b>Bathrooms</b>	The regulations require a fan capable of a minimum extract capacity of 15 litres/s (54m <sup>3</sup> /hour)
<b>Kitchens</b>	The regulations require a fan capable of extracting 60 litres/s (216m <sup>3</sup> /hour)
<b>Utility Rooms</b>	The regulations require a fan capable of extracting 30 litres/s (108m <sup>3</sup> /hour)
<b>Toilets</b>	The regulations require a fan capable of at least three air changes per hour and with a 15 minute over-run timer.

## NOTE:

All electrical work must conform to BS 7671 the current IEE wiring regulations and Part P of building regulations. You are advised to check with your local authority's Building Control Department, or an Authorised Competent Person before starting. If in any doubt about electrical work, contact a qualified electrician.

A direct replacement, without a wiring change, does not need to be notified to your Building Control Department.










A conventional mains voltage fan in a bathroom or shower area must be located where it cannot be touched by a person using the bath or shower and well away from any water spray.





## KEEP INFORMED

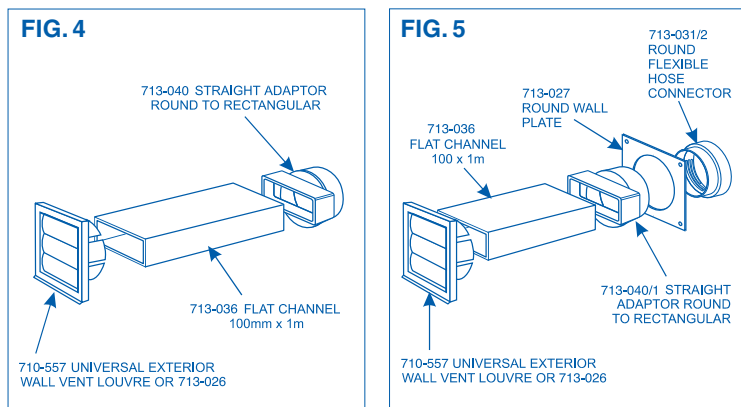
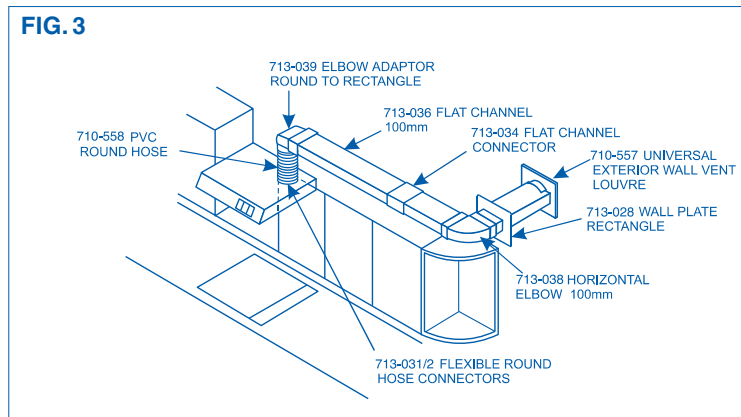
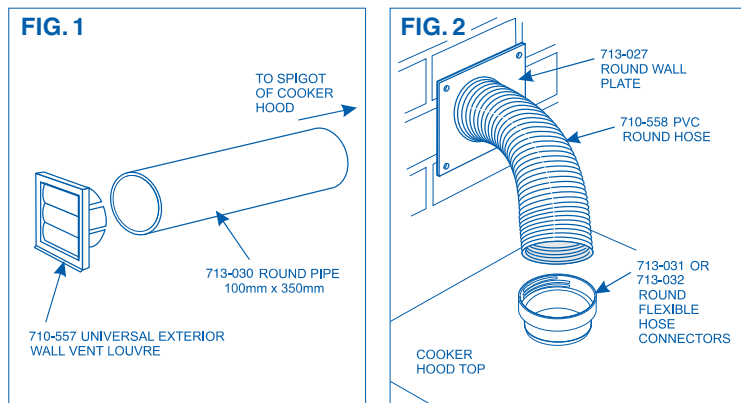
- Look for other Good Idea Leaflets that could help you with your current project.
- Check that your Good Idea Leaflets are kept up to date. Leaflets are regularly changed to reflect product changes so keep an eye on issue dates.
- If you would like to be put on our mailing list for the Wickes Catalogue, call our Freephone number which is:

**0500 300 328**

- Visit our website at [www.wickes.co.uk](http://www.wickes.co.uk)

PRODUCT CODE	DESCRIPTION	
713-036	Flat Channel 100mm x 1 metre	
713-038	Horizontal Elbow 100mm	
713-037	Vertical Elbow 100mm	
713-034	Flat Channel Female Connector	
713-035	Flat Channel Clips PK 2	
713-033	Flexible Rectangular Hose Connector 100mm x 0.5 metre	
713-032	Flexible Round Hose Connector 100mm Female	
713-031	Flexible Round Hose Connector 100mm Male	
713-039	Elbow Adaptor Round to Rectangular	

PRODUCT CODE	DESCRIPTION	
713-040	Straight Adaptor Female Round to Female Rectangular	
710-557	External Wall Louvre Vent	
713-029	PVC Duct Tape	
713-030	Round Pipe 100mm x 350mm	
713-026	Universal Wall/Ceiling Grille	
713-027	Round Wall Plate	
713-028	Rectangular Wall Plate	
710-558	PVC Round Hose 3 metre	
713-041	Straight Adaptor Male Round to Male Rectangular	



In old premises it is worth upgrading existing ventilation to meet these requirements and ensure adequate and worthwhile ventilation.

### COOKER HOODS

**FIG. 1 & 2** (overleaf) illustrate two simple methods of venting a cooker hood through an outside wall. Diagram 1 shows a round hole through the wall with a short section of pipe to the back spigot of the cooker hood.

**FIG. 2** shows how a flexible hose can be used to connect from the top of the cooker hood to the outside wall and **FIG. 3** demonstrates a typical layout whereby a cooker hood is vented to an outside wall along the top of a range of kitchen wall units.

### BATHROOM OR W.C.s WITH NO EXTERNAL WALLS

To comply with the Building Regulations it may be necessary in this situation to use Wickes ducting systems to link extractor fans to the outside.

Loft space or ceiling voids may be used as a route to achieve this.

**FIG. 4** illustrates how a round venting hose may be connected to the Wickes ducting system before exiting through the wall or the eaves soffit.

**NOTE:** To ensure complete safety all fans fitted in a bathroom or shower area must be installed and positioned in strict compliance with the manufacturer's instructions and BS 7671, the current IEE Wiring Regulations.

### TUMBLE DRYERS

**FIG. 5** illustrates a convenient method of venting a tumble drier through an external wall to the outside.

**NOTE:** Flexible ducting hose from the tumble drier should not exceed the appliance manufacturers recommended length.

### SYSTEM DESIGN

For maximum efficiency the air extracted must be replaced by a form of return flow ventilation. This is especially important where an air extraction system is installed in a building containing fuel burning devices such as gas boilers or water heaters, and solid fuel or oil burning appliances.

### CHOOSING THE RIGHT FAN

Centrifugal fans are designed to move air over longer distances and will perform well against the pressure caused by long lengths of ducting and resistance by grilles.

Axial fans are designed to move air over short distances, for example, directly through a wall.